



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,304	09/05/2003	Hironori Okado	116711	7433
25944	7590	06/03/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			VY, HUNG T	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/655,304

Applicant(s)

OKADO, HIRONORI

Examiner

Hung T. Vy

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>5/18/2005</u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The specification has been checked to the extent necessary to determine the presence of possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims (see table below) of copending Application No. 10/667,347, No. 10/657,108, and No. 10/654432.

10/655,304
1,3 and 15

10/667,347
1,10

10/654,432
1,11

10/657,108
1,11 and 12

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in present application are similar to claims in co-pending application as shown.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

Claims 1-8, and 10 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Lebaric et al., U.S. patent No. 6,747,605.

Claim 1, Lebaric et al. disclose an antenna, comprising: a planar antenna element (2,4,6..) having a feed point (24); and a ground pattern (14) (See column 4, line 50-55) juxtaposed with said planar antenna element (2,4,6,..) and wherein said ground

pattern has a trimmed portion (16,18) causing to continuously change a distance between said planar antenna element said ground pattern (See column 4, line 43-50 and fig.1).

Claims 2, Lebaris et al. disclose the antenna, wherein said trimmed portion (16,18) is formed from a point (10,12) near said feed point toward a side being opposite to said planar antenna element (2,4,6...)(see fig. 1).

Claim 3, Lebaris et al. disclose the antenna, wherein said planar antenna element (2,4,6,...) and said ground pattern (16,18) are formed extending along counter directions respectively (See fig. 1).

Claim 4, Lebaris et al. disclose the antenna, wherein said ground element (16,18) is disposed without fully surrounding said planar antenna element (2,4,6,...)(See fig. 1).

Claims 5-8, Lebaris et al. disclose the antenna, wherein said trimmed portion (16,18) is formed in a tapered shaped with respect to said feed point of said planar antenna element (see column 4, line 44), curved line being convex upwardly, and curved lines being convex downwardly (see fig. 1), tapered shaped (16,18) is symmetric with respect to a straight line (30) passing through said feed point of said planar antenna element (2,4,6,...) (See fig. 1).

Claim 10, Lebaris et al. disclose the antenna, wherein said planar antenna element (2a, 8B, 6B) has a shape in which a bottom side thereof has a straight portion or a substantially straight portion adjacent to said ground pattern (14), lateral sides thereof are provided vertically or substantially vertically to said bottom side, and a cut-out portion is provided in a top side thereof (See fig. 1).

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9, 11-12 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Lebaric et al., U.S. patent No. 6,747,605 in view of Abiko et al., U.S. Patent No. 4,816,835.

Claims 9, and 11-12 Lebaris et al. disclose the antenna, wherein said planar antenna element (2,4,6..) is formed on a dielectric substrate (5), (See fig. 1) but Leariset al. do not disclose said ground pattern is formed in or on a resin board, and said dielectric substrate is mounted on said resin board. However, Abiko et al. disclose the ground pattern in or on a resin board (See column 1, line 60-69 and column 2, line 1-8). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Lebaric et al. to have resin board as taught by Abiko et al. The motivation for doing so would have been to provide the resin aboard in order to minimize the insertion loss, whereby the assembling ability can be improved thus the high gain can be attained (See column 2, line 5-8).

5. Claims 13-15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Lebaric et al., U.S. patent No. 6,747,605 in view of Knoishi et al., U.S. Patent No. 6,707,427.

Claim 13, Lebaris et al. disclose an antenna, comprising: a dielectric substrate (5) on which an antenna element is formed (2,4,6,...); and wherein said ground pattern (16-18) has a tapered shape with respect to a feed point of said antenna element (2,4,6,...), and said antenna element an edge portion being opposite to the ground pattern side of said antenna element (see fig. 1), but Lebaris et al. do not disclose a board on which said dielectric substrate is mounted and in or on which ground pattern is formed to be juxtaposed with said dielectric substrate. However, Konishi et al. disclose a board (26) on which said dielectric substrate (21) is mounted, and in or on which a ground pattern (28) is formed to be juxtaposed with said dielectric substrate (21)(See fig. 9 and 15). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Lebaric et al. to have board as taught by Konishi et al. The motivation for doing so would have been to provide the aboard in order to minimize the insertion loss, whereby the assembling ability can be improved thus the high gain can be attained and easy to obtain.

Claims 14, Konishi et al disclose ground pattern has a region to separate said dielectric substrate (See fig. 6a).

Claim 15, adds into claim 13 "a RF circuitry mounted on said ground pattern" which Kosishi et al. teach on Fig. 6B and 6C.

Response to Arguments

6. Applicant's arguments filed on 04/26/2004 have been fully considered but they are not persuasive. Applicant made the following arguments:

- a. "Furthermore, as discussed above, Lebaric discloses dipole elements 2A, 4A, 6A and 8A on side A of substrate 5 and dipole elements 2B, 4B, 6B and 8B on side B of the substrate 5. Therefore, the dipole elements on side A are on different planes than the antenna elements on side B. The only "planar" element disclosed by Lebaric, at column 4, lines 18-19, is the insulating substrate 5, which is in direct contradiction to the conductive planar antenna recited in claim 1. Therefore, Lebaric fails to indicate a conductive planar antenna element, as recited in claim 1." page 5 sixth paragraph and page 6, first paragraph.
- b. "Moreover, the Office Action asserts that the balun 14, disclosed by Lebaric at column 4 lines 50-55, disclose a "ground pattern which is juxtaposed with the planar antenna" wherein the ground portion has a trimmed portion causing to continuously change a distance between the planar antenna element and the ground pattern, as recited in claim 1. Applicant respectfully disagrees." page 6, second full paragraph.

In response to Applicant's argument a above, the Applicant's arguments are not persuasive because Lebaric et al. disclose planar antenna element 2A, 4A, 6A on side A of substrate and 2B, 4B, 6B on side B of substrate 5 are not problem. The claim 1 does not recite a planar antenna element only on 1 side so Lebaric et al. disclose all structure of claim 1. Further, in response to applicant's argument that the references fail

to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a planar element are on one side or two side of substrate) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, Labaric disclose a conductive planar element, as recited in claim 1.

In response to Applicant's argument **b** above, the Applicant's arguments are not persuasive because base on Merriam-Webster's dictionary, the "juxtaposed" means that "to placed side by side" so Lebaric et al. disclose a ground pattern (14) juxtaposed with said planar antenna element (2,4,6,...) as recited in claim 1.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954.

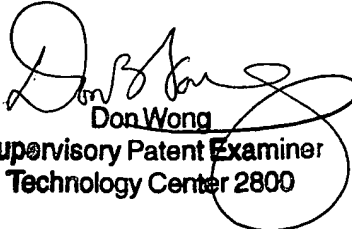
Application/Control Number: 10/655,304
Art Unit: 2821

Page 9

The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hung T. Vy
Art Unit 2821
May 30, 2005.


Don Wong
Supervisory Patent Examiner
Technology Center 2800